

stryker

Direct Anterior

The muscle-sparing approach



DART
Direct Anterior
Reconstructive Technique

Where procedure **meets technology**

Helping restore mobility through Mako SmartRobotics™ and our comprehensive implant portfolio to address patient indications and our customer needs.

Education & trainings



Implants



Mako Total Hip SmartRobotics™



Streamlined instrumentation



Patient positioning equipment



Outpatient/ASC



Medical education **tailored to you**

Stryker delivers a robust direct anterior education and trainings on the safe and effective use of our products, incorporating the latest and most relevant clinical insights and procedural innovations.

With our faculty experts from all around the country, our tailored programs are designed to help enhance and elevate surgeon skills at any point of your direct anterior learning curve!

Education & trainings:

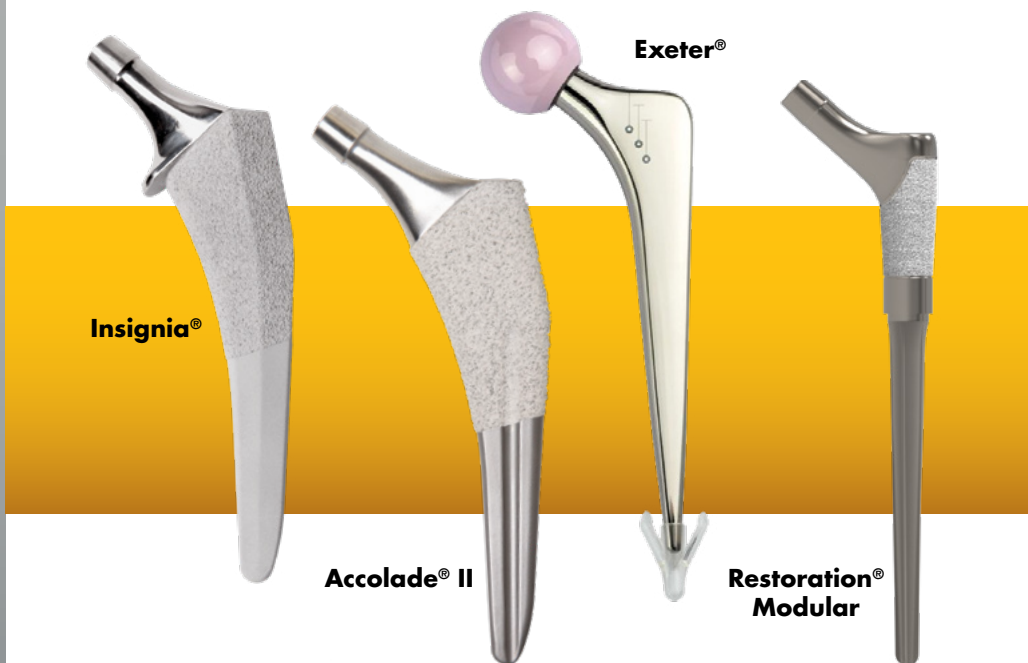
- **Strategies for success **introduction to Direct Anterior.****
- **Advanced Techniques in **complex primaries.****
- **Elevating Direct Anterior with **Mako Total Hip.****

Interested in attending a DART course?

Please scan the QR code below for more information!



Femoral portfolio



Insignia

Insignia leverages more than 1,300 CT scans utilizing a 3D modeling and analytics system, the Stryker Orthopaedic Modeling and Analytics (SOMA) bone database. The stem is engineered to optimize fit and function.¹

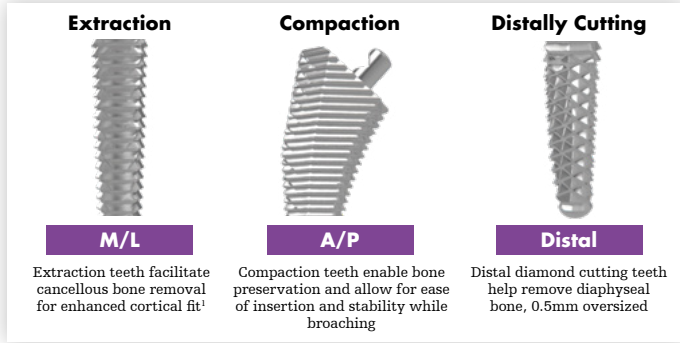
Key features include:

- A size-specific medial curvature to support cortical engagement.^{2,3,4}
- An optimized A/P fill* which is designed to preserve bone and prioritizes M/L fit prior to A/P filling of the femur.
- A size specific collar engineered to maximize calcar coverage.¹
- A direct lateral offset of +5mm across the size range to enable independent adjustment of offset while maintaining leg length.
- A slim distal profile designed to accommodate varying size femoral canals.

*Optimization subject to particular design constraints.

Broach with confidence

Insignia also utilizes a patent-pending Tri-Stage™ Broach designed with SOMA technology.



Accolade II

- Unique size-specific medial curvature: Offers increasing proximal conformity to enhance primary stability.^{5,6}
- Enhanced proximal-distal proportions:⁶ Shown to mimic canal anatomy to avoid distal only engagement and achieve cortical fit.^{7,8}
- Optimized stem length: Enables muscle-sparing approaches such as Direct Anterior or Direct Superior without sacrificing stability.^{6,9}

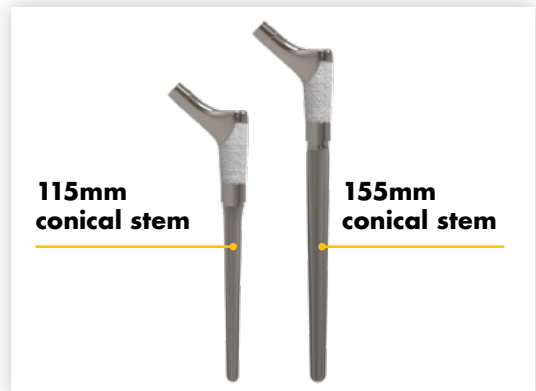
Exeter

- Polished, collarless, double-tapered.
- 29 stem sizes available!
- The 30–56mm offset options allow fine tuning of restoring the head centre independent of leg length and canal size.
- Additional 37.5/44/50mm offset stem options at L.125mm in the Exeter V40 range allow surgeons more treatment options for their patients.

Exeter
50
years

Restoration Modular

- Heavy grit blasted conical and HA coated stems and calcar body.
- Shot, peened taper junction.
- 115, 155, 195, 235mm conical stem length options.
- 3° core taper with 2° spline taper conical stem. The splines are designed to grow distally for increased distal cortical contact.



Acetabular portfolio

**Trident® II
Clusterhole HA**

**Trident® II
PSL Clusterhole HA**

**Trident® II Tritanium®
Multihole**

**Trident® II Tritanium®
Solidback**

**Trident® II Tritanium®
Clusterhole**

Trident II Tritanium

Get bigger, faster!¹⁰

- Slim shell wall enabled by additive manufacturing.
- 48/36, 50/36, 52/40 cup options designed to facilitate excellent ROM and enhanced stability.
- Modular dual mobility.
- 76% porosity (434 microns).

	Shell size (mm)			Maximum femoral head size (mm)
	48	50	52	
Stryker Trident II	36	36	40	
Zimmer Biomet G7	32	36	36	
Smith & Nephew R3	32	32	36	
Zimmer Biomet Continuum	32	32	36	
DePuy Synthes Pinnacle	32	32	36	

Modular dual mobility

- Over 10 years of clinical history.¹¹
- Excellent clinical outcomes were demonstrated in a study of 143 consecutive MDM primary THAs with minimum follow-up of seven years.¹²
- 315k+ MDM's implanted globally.¹¹



Restoration Anatomic Shell

- Hemispherical cup with an offset center of rotation.
- Anterior/superior beveled rim.
- SOMA designed peripheral screw hole placement and trajectory.
- Compatible with X3 liners and MDM.

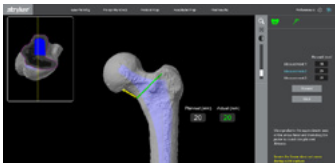


Elevate your Direct Anterior approach with **Mako Total Hip**



- Mako Total Hip has demonstrated accuracy of cup position to plan based off 3D CT plan.¹³
- Designed to provide intraoperative feedback on changes to patient's hip length and combined offset
- Uses AccuStop™ haptic guidance allowing for single stage guided reaming and guided impaction.
- Supports femoral stems Insignia, Accolade II, and Exeter as well as Trident II and Trident acetabular systems.

Planning features

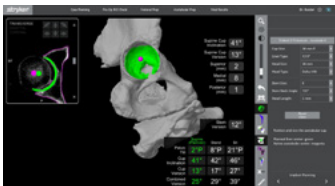


Digital ruler neck resection tool

- Allows surgeons to preoperatively measure and intraoperatively execute the neck cut.

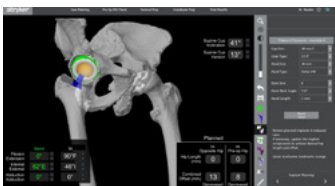
Neck resection broach view

- Provides surgeons with a view of the planned stem thus potentially allowing for enhanced guidance for placement and orientation of box chisel and initial broach.



Pelvic tilt planning

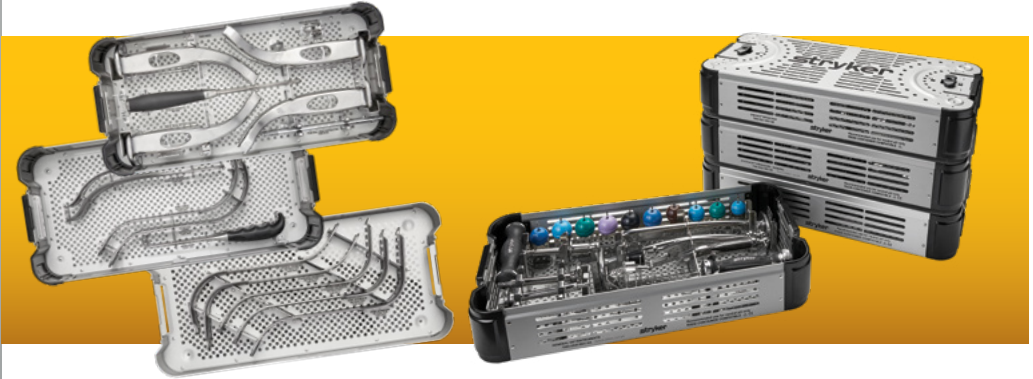
- After the surgeon inputs a sacral slope or pelvic tilt value from a standing and sitting lateral x-ray, the system is designed to automatically calculate the cup inclination, cup version, and combined version values for each pose (supine, stand, sit).



Virtual range of motion

- The surgeon can take the femur through a range of motion, based on the patient's sitting and standing pelvic tilt/sacral slope values, allowing the user to visualize potential impingement (bone on bone, implant on implant and bone on implant impingement).
- Allows surgeons to change implant position and/or implant systems to address potential impingement.

Direct Anterior streamlined instrumentation



Femoral tray system

Stryker's femoral tray system is built for efficiency. One general hip instrument tray is compatible across three femoral stems (Insignia, Accolade II, Exeter), allowing for minimal tray usage and cross-compatibility.

Streamlined instrumentations and fewer trays can help lower sterilization costs and create a system more suitable for today's health care environment, including Ambulatory Surgery Centers (ASC).



**Femoral
Instrument Tray**



**Insignia
Broach Tray**

Broach handles

Broach handles feature a lever that is designed to actively secure the broach. This design is meant to minimize potential toggle and facilitate reproducibility of bone preparation.

Each handle is fully compatible with Accolade II, Exeter, and Insignia femoral systems.



Extra Offset Broach Handle - Lever



Offset Broach Handle - Lever



Offset Broach Handle



Dual Offset Broach Handle



Orthopaedic **instruments**



Pairing power with protection for total confidence in the OR

System 8

Stryker's System 8 power tools are designed to deliver more of the long-lasting reliability you trust. Built for your OR, and your sterile processing department. In other words, built for the whole hospital.

So, put each power tool through its paces! Our engineers did, so that we know when the System 8 set passes from our hands to yours, you can have total confidence.

System 8 Precision Oscillating Tip Saw



The Precision saw features an enhanced design and expanded line of Precision cartridges for ankle, shoulder, hip, and knee arthroplasty. For the anterior approach in total hips, Precision may provide the following procedural benefits:

- Facilitates minimally invasive approach.
- Designed to aid visibility during MIS.
- Designed to help reduce potential of soft tissue damage in tight spaces.

T7 personal protection system

Innovation on the move

T7 has many powerful features that are designed to enhance your window and help you stay safe in the OR.

- LED light.
- Removable light shroud.
- Enhanced distribution airflow.



Pivot Guardian Direct



Expanding on the use of Pivot Guardian Distraction System for hip procedures

State-of-the-art specialty table designed to address a wide range of hip procedures with a strong emphasis on patient safety.

Features

- 1 Vertical spar:** Customizable foot positioning allows for easy leg manipulation to facilitate desired extension during surgery.
- 2 Direct fine traction:** Offset fine traction with indicator for internal, external rotation.
- 3 Femoral support:** Carbon fiber femoral support for stability during surgery and improved visualization* of critical anatomy.¹⁴
*As compared to surgical procedures with no support.
- 4 Table-top extension:** Carbon fiber tabletop extension designed to support joint replacement and trauma procedures.
- 5 Direct PostFree support:** Supports the contralateral leg and allows the option of operating post-free for direct anterior procedures.
Leg and foot extension: Allows for streamlined patient positioning and transfer. Compatible with both Pivot Guardian Distraction System and Pivot Guardian Direct.

Potential benefits

- **Mako compatibility:** compatible with the Mako robot for total hip applications.
- **Expanded clinical procedures:** direct anterior total hip arthroplasty, hip pinning, hip fracture, periacetabular osteotomy, derotational femoral osteotomy and more.¹⁴
- **Direct storage:** compact storage cart with customizable housing to hold all of Pivot Guardian Direct components, leaving a small footprint in both the ASC and hospital setting.

Stryker's **ASC business**



Whether you're growing your ASC or building from scratch, we deliver tailored solutions for where you are today and want to be in the future. The expertise. The products. The financing. The implementation. Stryker's ASC business delivers it all.

New build project needs – Customer snapshot:



1,400-annual surgeries

Provided implants and consumables to support sports medicine, joint replacement and pain management (plan to add specialties in future).



4 ORs

Provided surgical tables, lights, monitors, video, robotics, power tools, waste mgmt, tourniquet systems, surgeon stools and sterilization.



Total Joint robotics program

Established robotics program for hip & knee replacement.



5 Pre-op bays 5 Post-op bays

Provided stretchers, furniture, patient warming, overbed tables, recliners and transport carts.



Cost savings

Provided financial structure that minimized initial out-of-pocket capital expense.

Stryker's approach:

1. Evaluated comprehensive project scope (capital, implants, disposables, service, financial and clinical goals).
2. Calculated expected implant and disposable spend based on procedural case volume.
3. Determined a % of each implant/disposable to finance capital costs.
4. Put it all together in one agreement.

Tailored solution:



\$0 up-front out-of-pocket.



\$2.5M of capital equipment financed via Stryker implants and disposables.



Customized step-up payment schedule.



Flexible acquisition method for Mako SmartRobotics™ system.



Scan to hear from Dr. Gruber, President & CEO of Integrated Orthopaedics.

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